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LOCAL ANÆSTHESIA BY THE ARTIFICIAL PRODUCTION OF COLD.

[Read before the Suffolk District Medical Society, April 28th, 1866, and communicated for the Boston Medical and Surgical Journal.]

By CALVIN G. PAGE, M.D.

THE recent renewed interest of the profession in the subject of local anæsthesia by the artificial production of cold, has induced me to think that a brief sketch of the various efforts in times past for producing intense artificial cold would not be uninteresting, in connection with the results of some experiments in which I have been engaged for the purpose of testing the relative merits of various instruments and materials recently devised for that purpose.

The frigorific properties of nitre were undoubtedly known at a remote period by the oriental nations. It was also used in Rome in 1550, for the cooling of various drinks. This method of reducing temperature by the rapid solution of nitre with snow was extended by Boyle, and afterwards more successfully by Fahrenheit; and at the beginning of this century, Walker, of Oxford, and Lowitz, of St. Petersburg, resumed the subject, and produced compound saline powders of intense frigorific power.

The tables of Walker are of great interest, and two or three of his results are worth quoting. For example:—

With sea salt, 1 part	}	the thermometer fell from any temperature to -5°
and snow, 2 parts		
With sea salt, 5 parts	}	" " " " -25°
Nitrate of ammonia, 5 parts		
Snow, 12 parts		

Freezing mixtures were also made by the rapid solution of salts without the use of snow. For example:—

Sulphate of soda, 6 parts	}	reduces temperature from $+50^{\circ}$ to -10°
Hydrochlorate of ammonia, 4 "		
Nitrate of potassa, 2 "		
Diluted nitrous acid, 4 "		
Phosphate of soda, 9 parts	}	reduces temperature from $+50^{\circ}$ to -21°
Nitrate of ammonia, 6 "		
Diluted nitrous acid, 4 "		

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Sir John Leslie showed in June, 1810, before the Royal Society, his brilliant experiments for producing artificial congelation by means of exhausting the air in a chamber containing a flat pan of sulphuric acid, over which was placed another dish containing water; in a short time the whole mass became frozen. In 1817 he substituted for the acid porphyritic trap rock in powder, and still later parched oat meal, with a box of which a foot in diameter and rather more than an inch deep, he froze one and a quarter pounds of water.

The following table of extreme low temperatures, artificial and natural, measured by the spirit thermometer, is interesting:—

-135°.	The lowest artificial cold yet produced (Faraday).				
-121°.	Carbonic acid, liquefied by pressure, freezes.				
-55°.	Lowest atmospheric temperature observed by Parry.				
-60°.	"	"	"	"	Ross.
-71°.	"	"	"	"	Bach.

The possible use of cold for the production of local anæsthesia was first announced by Dr. James Arnott, of England, in November, 1847. More elaborate accounts of his process appeared in the *Lancet* of July 22d and Sept. 9th, 1848. Previous attempts in this direction—for example, the experiments of Mr. Nunnely on inferior animals and man, published June 24, 1848, and experiments by Prof. Simpson, of Edinburgh, on the local application of anæsthetics—show that earnest thought was turned to this subject very soon after general anæsthesia was found possible by ether and chloroform. Dr. Arnott says, in the *Lancet* of Dec. 1st, 1849, that it is two years since he first used cold for local anæsthesia, and more than a year since he assisted in its use for a surgical operation at the General Military Hospital at Chatham.

In 1850, by direction of M. Velpeau, who had seen some recent experiments by Dr. Arnott (in 1849) in the Paris hospitals, Messrs. Berand and Fouchét were directed to report upon the employment of frigorific mixtures to produce anæsthesia. The report is given in No. 42 of the *Union Médicale* for that year, and the opinion of M. Velpeau on its use may be found in his work on Cancer of the Breast (translation of Marsden, London, 1856). Arnott's undeveloped ideas on this subject may be found as early as his work on "Indigestion," &c., with an account of applying heat or cold in irritative or inflammatory diseases, London, 1847, 8vo., pp. 107.

The first public use of this method of local anæsthesia in our own city, which has come to my knowledge, was on June 13th, 1852, at the Massachusetts General Hospital, by Dr. J. Mason Warren, who operated on a nævus without pain, having first frozen it with a mixture of ice and salt. It was first used here on tissue in a state of acute inflammation, by Dr. Warren, in the winter of 1852-53, for a case of fascial paronychia caused by a dissecting wound; the superficial incision was painless. Since that time almost every surgeon has practically tried its value.

In the month of March last, Dr. R. M. Hodges, of this city, called the attention of the profession to a new method of producing local anæsthesia by the rapid evaporation of ether, devised by Mr. Richardson, of London, and published in the *Medical Times and Gazette* for February, 1866. Dr. Hodges at that time showed a model of an apparatus made after Mr. Richardson's description, and with *kerosolene* produced a greater degree of cold than that given by ether, with complete local insensibility of the part to which it was applied. On the 9th of April, Prof. H. J. Bigelow showed a new agent (since named rhigolene), by which a much greater degree of cold can be produced than by ether or kerosolene.

At the meeting of this Society a month ago, I showed a model of an instrument, made after the plan of Mr. Richardson, except that the tubes were not concentric, but were placed side by side. I also showed the vaporization of ether by my modified form of Bergsen tubes, originally shown and explained Nov. 26, 1865*, and expressed the opinion that a requisite degree of cold for all practical purposes could be produced by the ordinary Bergsen tubes if made in metal, and that my modification of form for atomizing in the mouth would be found to be perfectly adapted for local anæsthesia at all points where local anæsthesia was desired. I narrated a case at that time where it had been used with ether for the extraction of three teeth. I was uncertain then exactly how great a degree of cold could be produced by my instrument. Since then I have been studying the question of temperature, and have compared and registered the results produced by such instruments as I could obtain. I am indebted to the courtesy of Dr. Langmaid for the use of the original Richardson instrument brought by him from London. My first trial of the instruments, side by side, on a common thermometer, is here given :

April 18, 1866, Central office of Boston Dispensary,	Page's tubes, Richardson's,	Ether.	Rhigolene.	Time.
		-4°	-16°	one mi- nute.

It is hardly necessary to give the daily detail of experiments as tabulated, but is sufficient to record that I found that the large bulb thermometers were not so quickly affected in the low temperatures as the small ones, and after April 24th all my results were registered by a standard thermometer. After this date I used an atomizer with smaller tubes and finer cones, which gave, April 27th, by standard thermometer, with rhigolene, -16°; ether, -4°; time, 45". And on April 28th, at the office of Dr. Bigelow, with rhigolene, both his instrument and my own gave -16° in about one minute.† Practically, then, we have at command a temperature more than sufficiently low and always available.

* See Boston Medical and Surgical Journal, Feb. 1, 1866. Extracts from Records of Boston Society for Medical Improvement.

† I have found that lower temperatures are produced by both ether and rhigolene when they have been cooled to 32° Fahrenheit, and that the difference between ether and rhigolene is pretty constant on all thermometers, being about 12° in favor of the rhigolene.

It is well known that the temperature of the ordinary freezing mixture of ice and salt is from 0° to -2° . This temperature has been found sufficient for freezing living tissue and destroying local sensibility, but this mixture requires time for preparation, is sometimes difficult to apply, and is not available in the mouth. Ether (easily reduced to -4°), when vaporized in the mouth, produces irritation and disagreeable disturbance of the mucous membrane. Rhigolene has no such objection; when applied in the mouth it causes no irritation, nor does it produce any of the signs of general anæsthesia, the time taken in applying it being only from five to ten seconds. I have used it successfully in nine cases at the Central Office of the Boston Dispensary on teeth. The gum outside and inside should be slightly frozen, and should the crown of the tooth be found broken, it can be applied directly upon the carious part of the tooth, which may then be extracted without any outcry from the patient. I have also used it in various minor operations at the Dispensary, for Dr. S. L. Sprague, as extracting a fish-hook from the finger, extracting a needle from the hand, opening an abscess on the shoulder, a felon, &c.; and also at my own office for the first time on Sunday, April 15th, for opening a felon, and since then twice for felon and once for abscess, with perfect success.

The result of all my experiments and trials seems to prove that rhigolene is a perfectly successful local anæsthetic, and in the mouth is superior to anything yet used; That ether will do the work on the external surface of the body without difficulty, as it can be brought below the temperature of the ordinary freezing mixture, but requires more time; That the Richardson instrument has no powers not equalled or surpassed by my modification of the Bergsen tubes. It is probable that the ordinary Bergsen tubes, made of smaller tubing and with finer points, will be finally used for local anæsthesia, with such modifications of form as will render them applicable to the mouth and the vagina. The excess of fluid in the tube is best prevented by placing a bit of sponge or wicking in the open end of the fluid-bearing arm of the tube.

Instruments with stop-cocks or cylinders requiring lubrication are not available with rhigolene, which takes up all oily matter in solution and causes leakage—for example, Luer's atomizer. Glass tubes will not answer, glass being a non-conductor.

Dr. Bigelow, in his article on Rhigolene, gives a temperature of -19° as easily produced, but does not give the time necessary to produce it. I doubt if such a low temperature can be produced on a standard thermometer in sixty seconds, the time allowed in most of my experiments, by any instrument yet devised, though it can be if sufficient time is taken. The only objections to rhigolene are that it must be kept very cool and cannot be conveniently carried about in warm weather or in the evening, as it boils at 70° , and is inflammable.

NOTE I.—In addition to the authorities named in the body of the article, gentlemen interested are referred to the following works for more detailed information. These references are to the early efforts to produce artificial cold, and to show its early history as an anæsthetic. It must not be understood that they are intended to be a complete bibliography of the subject. *Philosophical Transactions*, vol. 65, p. 124; vol. 77, p. 282; vol. 78, pp. 125, 277, 395; vol. 85, p. 270. *Enc. Britan.*, art. Heat. Biog. Sir John Leslie, &c. *Tomlinson's Useful Arts*, vol. 2, p. 13. Four Pamphlets by Dr. James Arnott, London, 1849, 1851, 1852, 1855. *Bulletin de l'Académie de Médecine*, vol. 15, p. 85, séance du 16 Octobre, 1849. *Union Médicale*, Nov. 23, 1850. *Gazette des Hôpitaux*, Nov. 16, 1854. *Holmes's System of Surgery*, London, 1860, vol. 1, p. 568; vol. 3, p. 92. *Erichsen's System of Surgery*, London, 1861, p. 13. *Chemistries*, article Heat, e. g., *Turner's*, p. 39 et seq. *Simpson's Obstetric Works*, second series, Philadelphia, 1856, p. 667 et seq. *Boston Society for Medical Improvement, Extracts from Records*, vol. 1, p. 344. *Boston Medical and Surgical Journal*, April 12 and April 19, 1866. And the following, quoted in *Braithwaite*:—*Monthly Journal of Medical Science*, July, 1854, p. 33. *Lancet*, April 15 and May 6, 1854, pp. 415 and 489. *Medical Times and Gazette*, July 1, p. 11; Sept. 2, p. 248; Sept. 30, p. 342; Oct. 7, p. 379, all of 1854. The date of its introduction into Germany I have not been able to obtain; it was probably 1848-9.

NOTE II.—To allay any theoretical apprehension of dangerous reaction, I append the following quotation from Arnott, p. 21, on Neuralgic, Rheumatic and other Painful Affections, &c., London, Churchill, 1851. "Any objection to congelation, on the score of reaction being likely to be caused by it, or other injurious effects, can only originate either from not distinguishing between the lowest temperatures hitherto employed in medicine, and one forty degrees lower still, or from not perceiving the difference that subsists between a regulated and limited congelation and one that is uncontrolled or unlimited. Although it has now been employed thousands of times, both as an anæsthetic and a remedy, I have never observed any such result." My own experience, though limited, accords with this view.

C. G. P.

CASE OF MULTILOCLAR OVARIAN CYST—TAPPING—OVARIOTOMY—DEATH THIRTY HOURS AFTER.

[Read before the Norfolk District Medical Society, May 9th, 1866, by Z. B. ADAMS, M.D., of Roxbury.]

Mrs. B., aged 42, mother of two children. Ovarian disease first discovered in March, 1865, by the late Dr. Charles Windship, of Roxbury. Abdomen began to enlarge during the following summer, accompanied by procidentia uteri and vaginal eversion. Pessaries and uterine supporters were used without relief. The abdomen increased in circumference at about the average rate of an inch a month. In December, she measured 42 inches in girth at the umbilicus, and presented very much the general appearance of a woman at the end of the ninth month of pregnancy. There was then œdema of the lower extremities, some dyspnœa and cough, loss of flesh, pain in the back, dyspeptic symptoms, and deficiency of urine. The catheter showed nothing abnormal about the bladder. The uterine sound discovered no disease in the uterus, which was movable and not closely attached to the tumor. The patient was unable to lie down for more than an hour or two at a time, and had to rise during the night, often more than once, and walk the room for relief from oppression. She had two attacks of sharp pain in the neighborhood of the umbi-

licus, accompanied with general distress, lasting for a few hours each time. Menstruation was somewhat irregular, but did not cease. The tumor was movable, fluctuating more distinctly on the right side than on the left, and most prominent in the middle of the abdomen. The falling of the womb, together with indigestion, loss of appetite, nausea, restlessness, inability to lie or sit with comfort, and cough, rendered life a burden almost too heavy to be borne. Her face had the expression said to be characteristic of ovarian disease.

She was examined by Dr. D. Humphreys Storer, and afterwards by Dr. Henry J. Bigelow, of Boston, and the tumor was decided to be a multilocular ovarian cyst. The presence of a certain amount of ascites was suspected.

Dec. 29th, 1865.—Tapped with a large trocar, three inches below the umbilicus, on the median line, at the lower border of what appeared to be a large cyst. Several small cysts were evacuated, and a little more than a pint of sticky, straw-colored, cystic fluid, streaked with blood, came away. No bad effects resulted.

Jan. 12th, 1866.—One week after the close of a menstrual period. Operation. The patient was dressed in woolen under-clothing. The bowels and bladder were emptied. At 12 o'clock, noon, she began to take chloroform.* After she was fairly under its influence, she was removed into a room having a temperature of 75° F., and placed upon a table prepared for the purpose. Drs. Gilman Kimball of Lowell, H. J. Bigelow, R. M. Hodges, C. G. Page and D. W. Cheever of Boston, were then introduced. An incision through the integuments on the median line, from half an inch below the umbilicus to two inches from the pubes, was made, which was subsequently carried upwards about an inch farther. The fascia and other tissues, including a few fibres of the right rectus muscle, were carefully divided on a director, until the peritoneum was exposed. There was little or no bleeding, and the serous membrane was raised upon a hook and perforated, when a small quantity of ascitic fluid escaped. A very broad director was then introduced up and down, and the peritoneum divided upon the median line, exposing the tumor with a glistening opalescent surface and large vessels ramifying upon it. A silver catheter passed around, showed it to be non-adherent on its anterior surface. It was at once punctured with a half-inch trocar, but no fluid came. It was therefore freely opened with the knife. A great many cysts were successively broken down by the hand, discharging, some thin, and others thick and gluey fluid. The tumor burst in withdrawing it, which was a source of some delay. It was found to be adherent to the omentum above, and also by a small firm band to the mesentery. These adhesions were separated by the hand. The omentum bled freely and was tied in two places with fine silk, all the ragged parts being brought together and tied, and the

* Chloroform was used, because ether had on two previous trials produced obstinate and long-continued nausea and vomiting.

cut stump laid upon the skin until the rest of the operation was completed. The band of attachment to the mesentery was not tied, as it did not bleed. The pedicle of the cyst was about three inches long by three wide, and consisted of the right broad ligament, Fallopian tube and vessels, enlarged. A clamp applied to the pedicle broke and was removed. The pedicle was tied in three portions, the whole being surrounded with a stout silk ligature, and the tumor cut away. The pelvis was then thoroughly sponged out and wiped clear of clots and fluid. While doing this, another small cyst was found upon the left side, which had previously escaped observation, although that side had been searched. This cyst was about the size of a hen's egg, and contained a clear fluid in thin walls. It was opened, a piece cut out, emptied and returned. The ligatures around the pedicle were then wound around a director and brought, together with the ligatures upon the omentum, to the lower part of the opening. Three deep silk sutures traversing the skin, and also the peritoneum at about one third of an inch from its cut edge, brought the wound together. Adhesive straps were applied between. The whole operation occupied one hour. The patient was put to bed with bottles of hot water under the armpits and against the sides. The tumor and fluid contents weighed thirty pounds; the solid portion, six pounds.

After the operation. General appearance of patient good. Recovering well from chloroform. Pulse before operation, 92; immediately after, 80. At 3½, P.M., some backache, also nausea, belching of wind and sweating. Gave injection of tinct. opii, gtt. xxv., in water ʒ i. Hot linseed-meal poultice to abdomen. Champagne and ice. At 5, P.M., vomited one ounce of watery fluid, containing dark-brown masses. Pulse 80, feeble. Brandy and ice instead of champagne, which disagrees. Pain in pit of stomach. At 5.20 gave sol. morphiae, ʒ i., and at 5.45. At 6, complained of weight of bed-clothes. Sweating considerably. Nausea distressing. Removed poultice. At 6½, repeated the laudanum injection *ut supra*. Vomited once, with distress. Pulse 90. At 7, P.M., eight ounces of clear urine drawn by catheter, with relief. Dozed half an hour. At 8, P.M., pulse went up to 100. Nausea and belching, with distress. At 9.45, asked for gruel, and took three tablespoonfuls at intervals, with ice. At 10½, pulse 120. At 11.20, pain recurred in pit of stomach. Took sol. morphiae, ʒ i. Pulse 104, good. 1½, A.M., catheter passed; brought no urine. Thirst and vomiting, chiefly clear watery fluid. At 2, A.M., sol. morphiae, ʒ i., to relieve pain and vomiting; also injection of laudanum, gtt. xxv. At 4½, P.M., patient in great distress. Vomited a large quantity of water, with relief. At 6, A.M., nausea very distressing. Has not slept during night. Pulse 116, soft. At 7½, P.M., faintness occurring, I let go the ligature, removing the director entirely, introduced my finger and opened the lower portion of the wound. No decided tympanites. Re-applied hot flaxseed poultice. Injection of brandy and laudanum. 8.20, pulse

140, soft. Has vomited once since letting go ligature. Says she is dying. At 9, pulse scarcely perceptible. Nausea continues. Twelve ounces of dark-red urine drawn by catheter. Complains of pain over the bladder. A thin, reddish, sero-purulent fluid flows freely from lower end of wound. Introduced a small silver tube and drew off several ounces of this matter. Left the tube in the aperture. A tent of cloth was afterwards substituted. Complains of feeling chilly. Vomits a substance like coffee-grounds. Great prostration. Sordes on teeth. Injection of beef-tea and brandy, which was retained. Brandy and soda water by the mouth. At 10½, A.M., dozing, with labored respiration and occasional sighing. Face blue. At 11, drawing up her knees. Complains of weight in bedclothes, which are raised so as scarcely to touch her. Skin cold and clammy. Pulse 160. Face anxious.

From this time she sank, though conscious to the last. Nausea and vomiting ceased in great measure during the afternoon. Turned herself and drew up her knees repeatedly. Very profuse discharge from aperture by the side of the tent. Injections and the rectum-tube were applied without relief. Not much tympanites. At 5, P.M., six ounces of high-colored, turbid urine drawn. At 6, P.M., had a stool in bed, consciously. Death at 7, P.M. No *post mortem*.

AIR COOLER AND PURIFIER.

[The following letter to one of the Editors cannot fail to be of general interest.—EDS.]

NORTHAMPTON, MASS., May 7th, 1866.

MY DEAR DOCTOR,—Your kind favor of the 30th April was duly received, and I willingly comply with your request to send for the JOURNAL a description of the "air cooler and purifier" which I saw in operation.

While pursuing, last winter, in New York, some investigations on the old subject of heating and ventilation, my attention was directed to an apparatus for *cooling* and ventilating. It was said to be in operation at the Bellevue Hospital, and to have received commendatory notice in letters to the inventor from Professors Flint and Do-remus. Failing to find either of these gentlemen I sought the inventor, and his son accompanied me to the Hospital, where two of the "purifiers" were in operation.

The apparatus consists of a tight box of wood, about six feet in height, and fifteen by twenty-three inches on the sides. It is placed at the head of the patient's bed. In the box are shelves or pans. The lowest contains lumps of quicklime. The next above, which is of wire netting, is filled with small pieces of charcoal, and one in the upper part, under a metallic roof, holds small fragments of ice. Air is admitted to the lower part of the box by a side opening.

Passing over the lime, which absorbs some of its moisture, the air becomes slightly warmed, and rises through the charcoal to the top of the box. Here, coming into contact with the ice, it is cooled, falls in an accelerated current through a flue, and flows from the box through another opening just above and on one side of the patient's head. A slight frame supports, around the bed, a curtain, which is tucked under the mattress to prevent the cooled air from flowing off to the floor. Here, within his curtains, the patient is immersed in a bath of pure and cool air about thirty inches in depth.

This is a very meagre description of a very simple apparatus, and one would hardly expect any great effect from such a combination of such materials. It was therefore with great surprise I heard from the patient the great praise he bestowed on what he called his "blower." His remark was that "the air from it was as cool and fresh as if it came from an open window," and he complained bitterly of the negligence of the nurse, who sometimes failed to give him a full supply of ice for the night.

The great difference, however, between the temperature (and other sensible qualities) of the atmosphere outside and inside his curtain, as roughly tested by placing the head and hand for a few moments inside the inclosure, was quite sufficient to satisfy one that the patient had sufficient cause for his somewhat enthusiastic eulogium.

If further experience demonstrates that this simple apparatus is really what a cursory inspection leads one to believe—if the evidence of the senses is corroborated by the more severe tests of science—one sees at a glance its wide application to the wants of our patients in hospital and in private practice. They have received a boon of incalculable value in this simple contrivance.

The theory of its operation is plausible. We all know the deodorizing and disinfecting properties of charcoal; its power to absorb from the atmosphere and destroy the ammoniacal, sulphurous and organic compounds which render the wards of a hospital so unpleasant and unhealthy, each cubic inch of charcoal taking up and destroying ninety cubic inches of ammoniacal gas, eighty cubic inches of sulphuretted hydrogen and considerable quantities of other deleterious compounds. We also know that quicklime has a great affinity for carbonic acid, every one hundred pounds absorbing twenty-four pounds of this gas; and that it absorbs and decomposes sulphuretted hydrogen, the compounds of ammonia and other products of animal decomposition. The other material used—ice—presents, on its surface, a thin layer of water, which is another absorbent of sulphuretted hydrogen and ammoniacal gas, taking up 780 times its bulk of the latter.

We have, then, in this apparatus, three great absorbents of the disgusting and deleterious products of decomposition—three of Nature's great purifiers—and, theoretically, this combination *ought* to

result in a great purification of any current of air thoroughly exposed to its action.

The problem was to force a current over these materials, after they had been selected, and to collect and retain, where it was wanted, the air thus purified. The inventor has here availed of the natural laws according to which warm air rises and cool air falls. He claims that it supplies from fifty to eighty cubic feet of purified air every minute, and that "thirty pounds of ice will blow sixty cubic feet a minute for eight or ten hours in a warm night"; and that "the expense of materials (ice, charcoal and lime) for providing a steady current of fifty cubic feet a minute, perfectly purified, and in the hottest weather cooled 20° , and properly dried, has been less than two cents an hour."

If the half of this should prove true, one need not lie in gasping, sweltering wakefulness through the tedious hours of a smothering summer night, sighing for a breeze from the ocean or the mountain. If, again, the current flowing over their beds is so cooled and so purified, we need no longer send our little cholera infantum patients to the mountains, because, in fact, the mountain has come to them. The cool freshness of the snowy peak, even, may be made to surround and impart to the sufferer its tonic virtue, even in the heart of a crowded, heated city.

By changes in the materials through which the air is made to pass, it could be adapted to many varying wants of our patients. The cooling, alone, would be productive of great benefit and comfort in many cases. There is no one of us, however healthy, who would not feel better for a night passed comfortably in a moderate temperature, after the exhausting heat of a midsummer day; and probably very many cases of the diseases so prevalent during the excessive heats of summer might be prevented by the use of some such means as are here offered.

The cooling is, however, quite secondary in importance to the purification; and if the fact of purity can be established, one would not incline to discuss the point of temperature. For a field is at once opened far wider than the narrow limits of a single bed in a hospital ward or private house. One naturally asks why a whole ward should not be purified; and if one ward, why not a whole hospital or dwelling house? Then, why should not those awful scourges that visit us in the forms of erysipelas, pyæmia, gangrene, diffuse suppuration, puerperal fever, and the whole foul race that breed and revel in a noxious atmosphere, be forever banished—charred and calcinated out of existence.

May not this little simple box contain the germ of an apparatus easily adapted to the purification of a whole hospital? May it not be an anti-Pandora-box? Means less expensive than ice could be used for establishing the current, and also for cooling it. And, if

the lime and charcoal failed to eliminate from the air the germs of those troublesome diseases which so infest our hospitals at times, might they not so *modify* the atmosphere as to destroy their proper *nidus*, and thus *render them abortive*? or prevent germination and development of fungus or animalcule *by the destruction of their proper and specific pabulum*?

I trust this little apparatus may have among you in Boston the fair trial to which its claims and its apparent success seem to entitle it, and that among the scientific men collected about your hospitals some may find leisure to examine and report upon these claims, and that speedily.

Very truly yours,

W. H. PRINCE.

Reports of Medical Societies.

ANNUAL MEETING OF THE NORFOLK DISTRICT MEDICAL SOCIETY AT DEDHAM, MAY 9TH, 1866.

THE Society met at the Phoenix House, at 11 A.M. The President, Dr. Cotting, in the chair. The records of the last meeting were read and accepted. In the unavoidable absence of the secretary, Dr. Z. B. Adams, of Roxbury, was appointed secretary *pro tem*. A committee was appointed to nominate officers for the coming year.

The Treasurer's report was read and accepted.

The President stated the necessity of increasing the annual assessment, and suggested the propriety of intimating to the Councillors of the Massachusetts Medical Society the opinion of this society in regard to the matter.

The District Treasurer remarked that the present allowance did not meet the requirements of the District Society.

Voted, on motion of Dr. Draper, of West Roxbury, to notify the Councillors of the willingness of this Society to have the annual assessment raised to five dollars—one fourth to revert as heretofore.

Nem. con.

Voted, to adjourn for dinner at 1½ o'clock.

Voted, that the next meeting be held in Roxbury.

A paper was read by Dr. Z. B. Adams, of Roxbury; case of ovariectomy, fatal. The President remarked upon the importance of reporting the unfavorable cases of this operation, in order to obtain a correct estimate of its dangers, and stated that he knew of at least one other fatal case of ovariectomy, in Roxbury, as yet unreported, and believed there had been still another quite recently.

Dr. Munroe inquired if chlorate of potassa had been tried in Dr. A.'s case. Dr. A. replied no, but the bromide had.

Dr. Munroe, of Medway, read a case of opium poisoning successfully treated by the continued dropping of cold water from a height upon the epigastrium.

Dr. Salisbury stated that the effusion of cold water upon the head in opium poisoning had been employed in England.

The President presented Dr. Richardson's pulverisateur, just brought

from London by Dr. Langmaid, of Boston, and a bottle of Rhigolene for producing local anæsthesia, and showed the manner of using it. He had employed this lately in a case of so-called "ingrowing toe-nail." The parts were frozen in a very few seconds, and the portion removed without pain to the patient. His method is to remove a portion of flesh from the side of the toe (say three quarters of an inch long and one half inch wide), including the diseased portion. He had practised this method many years, and had never as yet known of its failure to remove the difficulty.

Dr. Munroe described the practice of Dr. Miller, of Providence, in "ingrowing toe-nail," namely, to remove a large portion of the side of the toe, with a part of the nail, by the use of a gouge, applied upon the toe-nail and struck with a hammer.

The President stated that he had not found it necessary to remove any portion of the nail.

Dr. Bullard, of Dedham, showed some photographic portraits of distinguished French physicians and surgeons, including Ricord, Nélaton, Velpeau, Maisonneuve, Bernard, &c.

The President presented a copy of the Annual Dictionary of Dr. Garnier, of Paris, and read a critique upon it.

On report of the Committee on Nominations, the following officers were unanimously chosen, by ballot, for the year 1866-7:—*President*, Dr. B. E. Cotting, Roxbury; *Vice President*, Dr. Jonathan Ware, Milton; *Secretary*, Dr. Edward Jarvis, Dorchester; *Treasurer*, Dr. Eben. P. Burgess, Dedham; *Librarian*, Dr. David S. Fogg, South Dedham; *Councillors*, Drs. B. E. Cotting, J. G. S. Hitchcock, Edward Jarvis, S. Salisbury, Ira Allen, E. P. Burgess, C. C. Holmes, A. LeB. Munroe, Eben. Stone; *Censors*, Drs. G. Faulkner, W. C. B. Fifield, J. Seaverns, C. C. Tower, J. S. Greene; *Commissioner of Trials*, Dr. Ebenezer Alden; *Committee of Supervision*, Drs. J. P. Maynard, J. A. Stetson.

Dr. Salisbury, of Brookline, then read the annual address, on "Our Habits of Social and Domestic Life."

Voted, on motion of Dr. Robinson, of Roxbury, that the thanks of the Society be presented to Dr. Salisbury for his interesting and suggestive address.

Dr. Munroe said that he was glad to hear Dr. Salisbury's views on education and the management of children, and that he thought the plan instituted by Horace Mann had been productive of harm from the continued application which was expected of children. That he thought there was not attention enough given to physical training. He advocated longer intermissions and out-of-door labor.

Dr. Alden, of Randolph, spoke of the injurious length of the sessions of schools, from 9 till 2, with only a quarter of an hour's intermission. Dr. Alden asked the Society to invite Dr. Salisbury to furnish a copy of his address for publication.

Dr. Holmes, of Milton, expressed similar views.

Dr. Burgess, of Dedham, spoke of the necessity of attracting attention to this important point, citing cases of impaired health in young people from too close application in school, and stating that as much could be learned without such close confinement.

Voted, that Dr. Salisbury be requested to furnish a copy of his address for publication.

The President appointed Drs. Fogg, Gilbert, Greene, Hitchcock and Holmes a committee to report a subject for discussion at the next meeting.

The meeting adjourned until 2½ o'clock, for dinner.

The Society met at 2½, P.M.

Dr. Fay, of Weymouth, having been examined and accepted by the Censors, signed the By-laws, and became a member of the Society.

The Committee on the subject for discussion at the next meeting reported, "The effect of the prevalent method of common school education upon the mental and physical development of the child." Report accepted.

Dr. Arnold, of Roxbury, exhibited photographs and read a description of a rare case of congenital hypertrophy, discoloration and corrugation of the skin of the forearm and shoulder in an infant.

Dr. Tower, of Weymouth, spoke of a somewhat similar case seen by him.

Dr. Stedman, of Jamaica Plain, read a case of excessive neuralgic pain following amputation of the forearm after injury.

Dr. Burgess, of Dedham, expressed his great interest in the paper read by Dr. Stedman. Dr. Arnold and others spoke of the value of subcutaneous injections in such cases.

The President spoke of cases reported relieved by enveloping a suffering limb with vapor, and cited a case of a subaltern officer, where there was no benefit from injection, or other treatment, but a favorable change came with time.

Dr. Tower, of Weymouth, cited a case of neuralgia of thirty years' standing, following an injury to the hand, where amputation was performed to remedy the symptoms.

Dr. Stedman stated that, in the case he reported, there was great improvement in the process of healing, after the second resort to subcutaneous injection, but no relief of pain. The first trial, three weeks previously, failed to benefit.

After a very full and animated session, the Society adjourned at 3¼ o'clock.

Z. B. ADAMS, *Secretary pro tem.*

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

SECOND DAY, May 2.—The Association was called to order by the President, Dr. D. H. Storer, at 9, A.M.

The Committee on Epidemics, Meteorology, &c., having been called upon, Dr. Davis stated that Dr. Hamill, of Ind., had presented a report, which he had taken to the Section on Epidemics, &c.

Dr. Cox made an additional report from the Committee on Arrangements on Railroads, that invitations had been received from Drs. Smith and Donelson, for the members to visit their houses that evening. He also recommended the following gentlemen as members by invitation: Drs. Jno. A. Reed, W. Whitridge, L. M. Eastman, of Baltimore; Peter Parker, of China. They were elected.

On motion of Dr. Davis, the order of business was suspended.

The report of the Committee on Publication was read and accepted.

On motion of Dr. Sayre, of New York, the Publication Committee were authorized to enforce strictly the rules in regard to proofs, &c.

The Treasurer then read his report, which was referred to the Committee on Publication.

On motion, the order of business was resumed.

On motion of Dr. Davis, a recess of fifteen minutes was taken by the Association, to allow of the appointment of members of the Nominating Committee.

The Nominating Committee.—On the resumption of business, the following members of that Committee were announced:—J. C. Weston, Me.; J. C. Eastman, N. H.; Wm. McCollom, Vt.; J. R. Bronson, Mass.; D. King, R. I.; W. Woodruff, Conn.; J. C. Hutchison, N. Y.; W. Pierson, Jr., N. J.; H. F. Askew, Del.; John L. Atlee, Pa.; J. J. Cockrill, Md.; M. A. Pallen, Mo.; N. S. Davis, Ill.; W. Lockhart, Ind.; J. M. Witherwax, Iowa; N. R. Bozeman, Ala.; C. M. Stockwell, Mich.; H. Van Dusen, Wis.; T. A. Atchison, Tenn.; G. Fries, Ohio; G. Tyler, D. C.; W. M. Charters, Geo.; Josiah Simpson, U.S.A.; Ninian Pinkney, U.S.N.; Greenville Dowell, Texas.

Dr. W. Hooker offered the following resolution, which was unanimously adopted:—

“Resolved, That no report or other paper shall be presented to this Association unless it is so prepared that it can be put at once into the hands of the Secretary, to be transmitted to the Committee on Publication.”

Dr. Wister, of Pa., offered the following, which was adopted:—

“Resolved, That Drs. Grafton Tyler, W. P. Johnston and Jas. M. Toner, of D. C., be a Committee to procure a room in the Smithsonian Institution for the preservation of the Archives of the Association.”

The Committee on Medical Education not having prepared a report, Dr. J. F. Hibberd offered instead thereof the following preamble and resolution, and moved that it be adopted as the sentiment of the Association:—

“Whereas, Two thirds of the Medical Colleges of the States of Ohio, Michigan, Illinois, Iowa, Missouri, Kentucky and Tennessee, by delegates in convention assembled in Cincinnati, on the 24th of April ult., did, by resolution unanimously adopted, declare their willingness to make their annual college sessions to continue for six months, and to establish a uniform rate of fees, if the other principal colleges of the country will coöperate; now, therefore,

“Resolved, That the American Medical Association hereby expresses its warmest approbation of the action of the above recited colleges, and expresses the hope that every medical college in the Union will concur in the proposition thus made.”

On motion of Dr. Taylor, of Iowa, its consideration was postponed till 11, A.M., on Thursday, to be acted upon in Committee of the Whole.

Dr. C. A. Lee, of New York, commenced reading his report upon Medical Literature. He divided up his subject as follows:—I. Periodical Medical Press. II. Medical Literature of the War. III. Literature of the Sanitary Commission and of Sanitary Sciences. IV. State and County Society Transactions. V. Literature of Special Subjects and of Specialties. VI. Literature of Pharmacy and Materia Medica. VII. Of Vital Statistics. VIII. Of Life Assurances. IX. And of Introductory Lectures.

He was interrupted at 11 for the regular order of business, which was the lecture of Dr. Brown-Séquard, on the Treatment of Functional and Organic Diseases of the Nerves.

On motion of Dr. Raphael, of N. Y., the thanks of the Association were tendered to Dr. Brown-Séquard for his interesting, able and eminently practical lecture, and he was requested to furnish an abstract for publication.

Dr. C. A. Lee then resumed the reading of his report.

After this had continued for some time, on motion of Dr. Toner, the further reading was discontinued, and the paper referred to the Committee on Publication.

Dr. Sam'l D. Gross, Chairman of the Committee on Medical Education, reported that he had not prepared a report, and asked that the Committee be discharged, which was granted.

Report of Prize Committee.—Dr. E. Eliot, Secretary of the Committee on Prize Essays, read the report of that Committee.

On breaking the seals, Dr. W. F. Thoms, of New York city, was ascertained to be the author of the "Essay on Health in Cities," &c., and was entitled to the first prize, and Dr. S. R. Percy, of N. Y., on "Digitaline," &c., to the second.

On motion, the paper on Angular Curvature of the Spine was referred to the Section on Surgery.

The report of the Committee on Medical Ethics having been offered, it was made the special business for 9.30 on Thursday.

Dr. Marsden, of Canada, having been announced as desirous of making some remarks on Cholera, on motion, it was agreed that he should follow immediately after the report on Medical Ethics.

Dr. Cohen offered a paper on Paralysis of the Vocal Chords and Aphonia, &c. Referred to the Section on Surgery.

Dr. H. R. Storer offered a paper on the "Clamp Shield," an instrument designed to lessen the dangers of extirpation of the uterus by abdominal section.

Dr. Bozeman, of Ala., was introduced to the Association, and on motion of Dr. Holton, he was made the member of the Committee on Nominations for Alabama.

Dr. Askew offered the following resolution on the death of Dr. Couper, which was unanimously adopted:—

"Whereas, We have heard with profound regret of the death of our deservedly esteemed friend and associate, James Couper, M.D., of Delaware, late Vice President, and one of the founders of the American Medical Association; and whereas, we desire to express our high appreciation of his worth as a man, and valuable and untiring energy in the cause of medical science; mild, modest and unassuming, of devoted piety, he was firm, constant and reliable; a strict adherent to the ethics of the profession, he occupied a front rank, and died beloved, respected and lamented by all who knew him.

"Resolved, That in the death of Dr. James Couper we have lost a friend and brother, and that we sincerely and deeply condole with his sorrow-stricken widow and family, and that the Secretary be authorized to forward a certified copy of these resolutions to his family."

Dr. Toner, of D. C., offered the following resolution, which was adopted:—

"Resolved, That instead of yearly reprinting the list of members of the American Medical Association with the Transactions of the same, the Secretary be instructed to prepare and have printed in pamphlet form, a triennial alphabetical catalogue, containing the Constitution of the Association, and a list of members, with their full names, designating their residences, the year of their admission, arrearage of yearly dues, the offices they may have held in this body,

and in case of death or resignation, the year, and distribute the same among the contributing members."

On motion, the resolution was referred to the Committee on Publication.

Dr. J. C. Hughes, of Iowa, offered a paper on Lithotomy, which was referred to the Section on Surgery.

Dr. Taylor, of Iowa, introduced a resolution for the appointment by the President of the Association of a member from each State, to memorialize Congress for an appropriation to publish the reports and documents of the Surgeon-General of the United States.

Dr. Pallen recommended that the reports and documents of the like character connected with the rebel army be also referred to the same committee for access to the same. Dr. Pallen, after some discussion, withdrew his amendment.

The original motion was carried.

It was then moved that the President announce said Committee on Thursday morning.

The meeting then adjourned.

THIRD DAY, May 3d.—The Association was called to order at 9, A.M., by the President, after which the announcement of the members of the Committee to memorialize Congress on the publication of the surgical history of the war was made.

Dr. C. C. Cox, of the Committee on Necrology, reported progress, and on motion of Dr. Hibbard, permission was given the reporter to send the report, when ready, to the Committee on Publication.

The Death of Prof. Joseph M. Smith, of New York.—Dr. Alfred C. Post offered the following, which was unanimously adopted:—

"*Resolved*, That the Association has heard with sincere regret of the death of its late distinguished member, Joseph M. Smith, M.D., of New York:—

"*Resolved*, That we cherish his memory as that of a learned and skillful cultivator of medical science, an able and successful teacher and writer, an upright and honorable man, and a patriotic and public-spirited citizen.

"*Resolved*, That the Secretary communicate to the family of the deceased an expression of our sympathy with them in their bereavement."

Dr. C. A. Lee rose to speak to these resolutions, which he did with much feeling. He hardly thought that it was necessary to say anything in regard to the life or character of such an excellent and well beloved man, but as he had been intimately acquainted with him for over thirty years, he did not think it out of place for him to say a few words. After referring in an appropriate manner to his acquaintance with the deceased, he remarked "that a more pure, upright and conscientious man I never knew, particularly with reference to his intercourse with medical men. When I think of the great loss we have sustained in him, I am at a loss to express myself."

Dr. J. S. King, of Natchez, Miss., forwarded a communication to the Association, stating that he was engaged in the compilation of the mortuary and similar statistics of the principal cities and towns of the country, and requesting that physicians would transmit to him such information upon those subjects as they could gather in their respective localities.

The Secretary read a communication from the Dubuque (Iowa) Medical Society, requesting the erasure of the name of Dr. Asa Horr.

On motion of Dr. Jewell, the request was granted.

Dr. Mayburry, on behalf of the Committee on Publication, to whom Dr. Toner's resolutions were referred, reported the following as a substitute, which, on motion, was adopted:—

"*Resolved*, That instead of yearly reprinting the list of the members of the American Medical Association, the Committee on Publication be instructed to prepare and print with the Transactions, an alphabetical catalogue triennially, containing a complete list of the permanent members, with their names in full, designating their residences, the year of their admission, the offices they may have held in the Association, and in case of death or resignation, the date thereof."

Dr. Mayburry also presented the following, which, on motion, was referred to the Committee on Ethics.

"*Whereas*, Medical organizations, such as National, State and County Societies, are believed to be absolutely necessary to preserve the honor of the medical profession, and to keep alive social and fraternal feelings among the members thereof, as well as an important means of promoting medical knowledge and elevating the character of the profession, therefore,

"*Resolved*, That it is with sincere regret that we, the members of the Montgomery County Medical Society of Pennsylvania, learn that some honorable members of the faculties of our medical colleges in Philadelphia and elsewhere, have kept aloof from the county societies on which rest both State and National organizations, thus ranging themselves on the side of those whose unprofessional conduct or low standard of medical attainment, or disregard of medical etiquette, prohibits them from membership in those societies.

"*Resolved*, That as graduates of the University of Pennsylvania, Jefferson Medical College and Pennsylvania Medical College, we have a high regard for the teachers of those institutions, and feel that they owe it to the profession and to our Alma Maters to give their hearty support to medical organizations in general, and especially to the County and State Medical Societies.

"*Resolved*, That although Colleges are entitled to representation in the American Medical Association by one or more of their Professors, we are decidedly opposed to any College or any other medical organization being represented by a Professor who is not a member of a County Society.

"*Resolved*, That the Corresponding Secretary of this Society be instructed to report these proceedings to the Philadelphia County Medical Society, and that our delegate be charged to lay them before the American Medical Association at the coming meeting to be held in Baltimore on the first day of May next, as well as before the Medical Society of the State of Pennsylvania at its next meeting, to be held at Kingston, Luzerne County, on the thirteenth day of June ensuing."

E. SMYSER,

Cor. Secretary.

W. P. ROBINSON,

President Montgomery Co. (Pa.) Med. Society.

The Report of the Committee on Ethics.—Specialties in Medicine.—Dr. Worthington Hooker offered the majority report, and in the main took the ground adverse to exclusive specialties. He divided up the subject into exclusive and partial specialties. In reference to exclusive specialism, he maintained that local affections were apt to be unduly estimated, to the exclusion, perhaps, of other parts of the system that were of more importance in the production of a particular disease; that diseases cured by a specialty are magnified in their importance; that specialists too frequently undervalue the treatment of diseases by the general practitioner; that there is a temptation to employ undue measures to obtain notoriety; and that he is further tempted to charge unduly large fees. The field of medical practice was so large that the profession was always willing to seek advice from those who had devoted attention to particular subjects; but this should not encourage exclusive specialism. The specialty should be a natural outgrowth from the general practice, and should never be separated

from it. If this were so, a full, frank and free intercourse would be had between the specialists and general practitioners. The means availed of by the specialists to bring this fact before the public should be ordinary, and not extraordinary. There should be neither advertisements nor puffs in the newspapers. The professor in a school has been chosen for it by those who are competent to discuss his merits for that position; if he were by himself to place before the public the fact that he is specially skilled in the branch taught by him, he would come under this censure.

The report was well drawn up, and claimed the undivided attention of the members.

Dr. Kennedy, of New York, followed with a minority report, stating that he would read it in the absence of the writer. The writer believes that the whole tendency in every department of science is towards specialties. Science has been advanced during the last century by this course. Recently this tendency has shown itself in the persons of certain practitioners who resign all general practice, and confine themselves to the specific department they have chosen. No association can object to the advertisement in such cases, unless it is of a mountebank character. The report was signed by H. I. Bowditch.

The subject was then discussed by Drs. H. R. Storer, of Boston, Worthington Hooker, of New Haven, and others; but the hour of 11 having arrived, Dr. W. Marsden, of Quebec, was introduced, and proceeded to address the Convention on the subject of cholera connected with quarantine.

[To be concluded.]

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MAY 24, 1866.

ANNIVERSARY OF THE MASSACHUSETTS MEDICAL SOCIETY.

It will be remembered that a resolution was adopted at the last meeting of our State Medical Society to hold a meeting on the day preceding that of the annual meeting, and a committee was appointed to determine how the time should be occupied. It will be seen by the card which has been sent to each member, and by the advertisement published in the JOURNAL, that the committee has prepared a programme which promises to make the occasion unusually interesting and instructive, and we trust that every one will show his sympathy with this effort to give new vitality to our ancient Association by coming to town on Tuesday. The meetings have been poorly attended of late, and the yearly publications have presented a very meagre appearance when compared with those of many of our neighboring State Societies, but it is evident from the variety and number of papers to be read on both days of the meeting that we shall not lack material for the next volume; so much has been provided, indeed, that there will be hardly time for their authors to give more than a brief abstract of what they have written.

The dinner which has been ordered by the committee of arrange-

ments, will be served in the beautiful Music Hall, and will be of a character to make amends for the shortcomings of the past two years. Many distinguished gentlemen have been invited to be present, and good speeches and good music will undoubtedly be heard. The museums also which will be open to members on the afternoon of the first day should be borne in mind, and the opportunity of seeing the rich collections they contain should not be neglected by those living at a distance from Boston.

The meeting of the Councillors will be held as usual on the evening of Tuesday, and several matters of importance to which we have lately called the attention of Fellows will, as we hear, be discussed. Very liberal arrangements have been made with the various railroads leading to Boston, by which members of the Society will be permitted to travel, at greatly reduced rates, and we hope that every county in the State will be well represented at the meeting.

American Microscopes.—During the past three years the importation of microscopes has been almost entirely stopped, while the demand for them has much increased. A consequence of this state of affairs is, that all the American opticians have orders in hand entirely beyond their ability to supply. A company is now being organized in this city to establish a manufactory in Boston or immediate vicinity, for the purpose of supplying the great demand for instruments. Mr. R. B. Tolles, of Canastota, will remove his establishment here if the small amount of funds required to enlarge his works is furnished. All who have read Prof. Holmes's articles, in the *Atlantic Monthly*, are aware of his estimate of the quality of the "Canastota microscopes;" and most of the best microscopists in this country know that Mr. Tolles has, for the last eight years, been producing "objectives" fully equal those made by C. A. Spencer, of the same place (who may be considered the originator of the modern "objective" of very large angular aperture), while the mechanical part of Tolles's work is, to say the least, unsurpassed, if it is equalled, by that of any workshop in London or Paris. Beside the superiority of Mr. T.'s work, he has made many and valuable improvements in the construction of his instruments, among which may be named his amplifier, doubling the magnifying power of all the combinations, his solid eye pieces, and his binocular eye piece, which, according to the testimony of Prof. H. L. Smith, far surpasses in its performance the binocular prism and tubes of Mr. Wenham, of London, which have been so highly appreciated in England that they have been sold by thousands. Mr. T.'s present location—some four hundred miles from the great cities of the country—is one utterly unsuited to his business, for purchasers cannot consult him in person, except by taking an expensive journey. But very few first class mechanics, such as he requires, will consent to go to such a place, or if they get there will remain, in consequence of which he is nearly or quite two years in arrear of his orders, and students in all departments of science are delayed in their studies for the want of instruments. American instruments have a double protection against foreign competition, a duty of 40 per cent., and are in every respect superior to the best instruments made in London, which in their turn surpass any made in Paris. There can be no reasonable

doubt of the success of such an establishment here. A large part of the capital stock is already taken, and it only remains for the friends of American science and art to take the balance, to found a workshop that will redound to the credit of the country. S.

EXTRACT of a letter from the Rev. Mr. Chester, Missionary of the American Board at Diuidigul, Southern India :

"In one of my former letters I spoke of a great heathen festival, held at a village five miles from Diuidigul, called Tahdikombo. It is held annually the last of October. This year cholera was taken from that feast to more than one hundred villages in the Diuidigul district, and perhaps to a thousand others in different parts of our mission field. I have not seen so much cholera since I have been in India. In the town of Diuidigul I attended over seventy cases, and we sent out medicine from the dispensary to more than three hundred more in the villages at or near which we have catechists. In one village where we have a congregation and school, seventeen recovered, out of twenty-one cases where our medicine was used; and the four cases of death were of those who sent for medicine after the state of collapse was fully established."—*Missionary Herald for May.*

FROM the Thirteenth Annual Report of the Directors of the Insane Asylum of California, we learn that the number of patients in the institution Sept. 30, 1864, was 581; number admitted, 268; whole number under treatment, 849. Number of patients discharged cured, 93; improved, 11; unimproved, 4; died, 82; eloped, 27. Number of patients discharged, died and eloped, 217. Number of patients remaining October 1, 1865, 632.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MAY 19th, 1866.

DEATHS.

	Males.	Females.	Total
Deaths during the week	36	49	85
Ave. mortality of corresponding weeks for ten years, 1856—1866	35.6	36.7	72.3
Average corrected to increased population	00	00	78.86
Death of persons above 90	0	0	0

BOOKS AND PAMPHLETS RECEIVED.—Clinical Notes on Uterine Surgery, with special reference to the Management of the Sterile Condition. By J. Marion Sims, A.B., M.D., late Surgeon to the Woman's Hospital, New York, &c. New York: Wm. Wood & Co.—Reflex Paralysis: its Pathological Anatomy and Relation to the Sympathetic Nervous System. By M. Gonzalez Echeverria, M.D. (Univ. of Paris), Physician to the Charity Hospital, New York, &c. New York: Baillière Brothers.—Legislative Reports of the Investigating Committee, and other Committees, concerning the State Lunatic Asylum at Stockton, California.—Thirteenth Annual Report of the Directors of the Insane Asylum of California, 1865.

DEATHS IN BOSTON for the week ending Saturday noon, May 19th, 85. Males, 36—Females, 49. Accident, 6—apoplexy, 1—congestion of the brain, 1—disease of the brain, 4—bronchitis, 4—cancer, 2—consumption, 22—convulsions, 4—cholera morbus, 1—cystitis, 1—diphtheria, 1—dropsy, 1—dropsy of the brain, 4—drowned, 1—enteralgia, 1—epilepsy, 1—scarlet fever, 2—typhuss fever, 1—hemorrhage, 1—disease of the heart, 2—disease of the hip, 1—infantile disease, 1—disease of the liver, 1—congestion of the lungs, 2—Inflammation of the lungs, 5—old age, 3—paralysis, 1—peritonitis, 1—pleurisy, 1—puerperal disease, 1—purpura, 1—smallpox, 2—syphilis, 1—teething, 1—unknown, 3.

Under 5 years of age, 24—between 5 and 20 years, 11—between 20 and 40 years, 26—between 40 and 60 years, 15—above 60 years, 9. Born in the United States, 50—Ireland, 27—other places, 8.